

## CLEAN VERSION OF CLAIMS

1 1. (Currently Amended) An electronic bill presentment and payment system for  
2 presenting and paying bills via the Internet, said system comprising:  
3 parsing functionality which is adapted to parse billing data from a plurality  
4 of billers using rules of conversion according to which said parsing functionality is  
5 programmed, corresponding to a plurality of data types, and to provide relevant  
6 information;  
7 a common document model processing functionality adapted to transform  
8 said relevant information into a common document model, wherein said common  
9 document model is adapted to accommodate said relevant information from said  
10 plurality of billers and according to said plurality of data types;  
11 a database adapted to store said transformed information from  
12 said common document model processing functionality; and  
13 presentation functionality adapted to retrieve information from said  
14 database and output at least some of said information via a network for use by bill  
15 payers.

1 2. (Currently Amended) The system according to Claim 1, wherein said parsing  
2 functionality is adapted to parse data from a print stream of data provided by said  
3 plurality of billers.

1 3. (Currently Amended) The system according to Claim 1, wherein said parsing  
2 functionality is adapted to parse data from a data interchange stream of data

3 provided by said plurality of billers.

1 4. (Currently Amended) The system according to Claim 1, wherein said parsing  
2 functionality is adapted to parse data from a financial data stream provided by said  
3 plurality of billers.

1 5. (Currently Amended) The system according to Claim 1, wherein said  
2 presentation functionality is adapted to output information for use by said bill  
3 payers using financial software.

1 6. (Currently Amended) The system according to Claim 1, wherein said  
2 presentation functionality is adapted to output information for use by said bill  
3 payers not using financial software.

1 7. (Currently Amended) The system according to Claim 6, wherein said  
2 presentation functionality is adapted to output information for use by said bill  
3 payers using a browser.

1 8. (Currently Amended) The system according to Claim 1, wherein said  
2 presentation functionality employs style sheet functionality in order to render  
3 information in a form suitable for said bill payers.

1 9. (Currently Amended) The system according to Claim 6, wherein information is  
2 provided to said bill payers using markup language.

1 10. (Currently Amended) The system according to Claim 1, further comprising an

2 interactivity functionality adapted to detect and respond to communications from  
3 said bill payers by at least (i) retrieving information from said database and  
4 presenting it to said bill payers in a form requested by said bill payers; and (ii)  
5 altering information in said database corresponding to said bill payers according to  
6 said communications.

1 11. (Currently Amended) The system according to Claim 1, further comprising  
2 interactivity functionality adapted to detect and respond to communications from  
3 said plurality of billers by at least retrieving from said database information  
4 corresponding to said plurality of billers and presenting it to said plurality of  
5 billers in a form requested by said plurality of billers.

1 12. (Cancelled)

1 13. (Currently Amended) The system according to Claim 1, further comprising a  
2 biller interface coupled to said database adapted to allow said plurality of billers to  
3 alter appearance and content of bills presented to said bill payers, said biller  
4 interface allowing said plurality of billers to communicate with said bill payers  
5 regarding said bills.

1 14. (Cancelled)

1 15. (Cancelled)

1 16. (Cancelled)

1 17. (Currently Amended) The system according to Claim 1, further comprising a  
2 financial source interface adapted to send and receive communications to and from  
3 at least one financial entity and to alter information in said database according to  
4 said financial source communications.

1 18. (Cancelled)

1 19. (Cancelled)

1 20. (Cancelled)

1 21. (Currently Amended) A method of providing electronic bill presentment and  
2 payment services, said method comprising the steps of:

3 extracting relevant information from billing data, corresponding to a  
4 plurality of data types, from a plurality of billers using rules of conversion;

5 transforming said relevant information into a common document model,  
6 which common document model is adapted to accommodate said relevant  
7 information from said plurality of billers and according to said plurality of data  
8 types;

9 storing said transformed information from said common document model  
10 in a database; and

11 retrieving said transformed information from said database and outputting  
12 at least some of said information via a network for use by bill payers.

1 22. (Currently Amended) The method of Claim 21, wherein said billing data is

2 extracted from a print stream of data provided by said plurality of billers.

1 23. (Currently Amended) The method of claim 21, wherein said billing data is  
2 extracted from a data interchange stream of data provided by said plurality of  
3 billers.

1 24. (Currently Amended) The method of Claim 21, wherein said billing data is  
2 extracted from a financial data stream provided by said plurality of billers.

1 25. (Currently Amended) The method of Claim 21, wherein said at least some of  
2 said information is output for use by said bill payers using financial software.

1 26. (Currently Amended) The method of Claim 21, wherein said at least some of  
2 said information is output for use by said bill payers not using financial software.

1 27. (Currently Amended) The method of Claim 21, wherein said at least some of  
2 said information is output for use by said bill payers using a browser.

1 28. (Currently Amended) The method of Claim 21, wherein said at least some of  
2 said information is output using style sheet functionality in order to render  
3 information in a form suitable for said bill payers.

1 29. (Currently Amended) The method of Claim 26, wherein said at least some of  
2 said information is provided to said bill payers using markup language.

1 30. (Currently Amended) The method of Claim 21, further comprising the step of  
2 detecting and responding to communications from bill payers by at least (i)

3 retrieving information from said database and presenting it to said bill payers in a  
4 form requested by said bill payers and (ii) altering information in said database  
5 corresponding to said bill payers according to said communications.

1 31. (Currently Amended) The method of Claim 21, further comprising the step of  
2 detecting and responding to communications from said plurality of billers by at  
3 least retrieving from said database information corresponding to said plurality of  
4 billers and presenting it to said plurality of billers in a form requested by said  
5 plurality of billers.

1 32. (Currently Amended) The method of Claim 21, further comprising the step of  
2 allowing said plurality of billers to alter appearance and content of bills presented  
3 to said bill payers.

1 33. (Currently Amended) The method of Claim 32, further comprising the step of  
2 allowing said plurality of billers to communicate with said bill payers regarding  
3 said bills.

1 34. (Currently Amended) The method of Claim 21, further comprising the step of  
2 sending and receiving communications to and from at least one financial entity  
3 and altering and storing information according to said communications.

1 35. (Cancelled)

1 36. (Cancelled)

1 37. (Cancelled)

1 38. (Currently Amended) An electronic bill presentment and payment system for  
2 presenting and paying bills via the Internet, said system comprising:

3 an extractor functionality which is adapted to parse billing data from a  
4 plurality of billers using rules of conversion according to which the extractor  
5 functionality is programmed, corresponding to a plurality of data types, and to  
6 provide relevant information, said rules of conversion being a rules application  
7 process, allowing a user to generate a translator for parsing the billing data into a  
8 common document tree;

9 a common document model processing functionality adapted to transform  
10 said relevant information into a common document model, said common  
11 document model adapted to accommodate said relevant information from said  
12 plurality of billers and according to said plurality of data types, wherein said  
13 common document tree contains data and attributes which are mapped into nodes  
14 which fit said common document model for storage;

15 a database adapted to store said transformed information from said common  
16 document model processing functionality;

17 presentation functionality adapted to retrieve information from  
18 said database and output at least some of said information via a network for use by  
19 bill payers; and

20 a bill payer interface coupled to said database adapted to allow said bill

21 payers to pay bills electronically.

1 39. (Currently Amended) The system of Claim 38, wherein said interface is  
2 adapted to allow said bill payers to specify the location of said output.

1 40. (Currently Amended) An electronic bill presentment and payment system for  
2 presenting and paying bills via the Internet, said system comprising:

3 parsing functionality which is adapted to parse billing data from a plurality  
4 of billers using rules of conversion according to which the parsing functionality is  
5 programmed, corresponding to a plurality of data types, and to provide relevant  
6 information, said rules of conversion being a rules application process, allowing a  
7 user to generate a translator for parsing the billing data into a common document  
8 tree;

9 a common document model processing functionality adapted to transform  
10 said relevant information into a common document model, said common  
11 document model adapted to accommodate said relevant information from said  
12 plurality of billers and according to said plurality of data types, wherein said  
13 common document tree contains data and attributes which are mapped into nodes  
14 which fit said common document model for storage;

15 a database adapted to store said transformed information from said common  
16 document model processing functionality;

17 a presentation functionality adapted to retrieve information from said  
18 database and output at least some of said information via a network for use by bill



19 payers; and

20 a biller interface coupled to said database adapted to allow said plurality of  
21 billers to identify market segments of said bill payers according to market rules  
22 and information retrieved from said database.

1 41. (Currently Amended) A system according to Claim 40, wherein said biller  
2 interface is further adapted to allow said plurality of billers to alter appearance and  
3 content of bills presented to said bill payers based on said market segments.

1 42. (Currently Amended) A system according to Claim 40, wherein said biller  
2 interface is further adapted to allow said plurality of billers to send marketing  
3 messages to said bill payers based on said market segments.

1 43. (Currently Amended) A system according to Claim 40, wherein said biller  
2 interface is further adapted to allow said plurality of billers to communicate with  
3 said bill payers based on said market segments.

1 44. (Cancelled)

1 45. (Cancelled)

1 46. (Previously Cancelled)

1 47. (Currently Amended) An electronic bill presentment and payment system for  
2 presenting and paying bills via the Internet, said system comprising:  
3 parsing functionality which is adapted to parse billing data from a plurality

4 of billers using rules of conversion according to which the parsing functionality is  
5 programmed, corresponding to a plurality of data types, and to provide relevant  
6 information, said rules of conversion being a rules application process, allowing a  
7 user to generate a translator for parsing the billing data into a common document  
8 tree;

9 a common document model processing functionality adapted to transform  
10 said relevant information into a common document model, said common  
11 document model adapted to accommodate relevant information from said plurality  
12 of billers and according to said plurality of data types, wherein said common  
13 document tree contains data and attributes which are mapped into nodes which fit  
14 said common document model for storage;

15 a database adapted to store said transformed information from said common  
16 document model processing functionality;

17 a presentation functionality adapted to retrieve information from said  
18 database and output at least some of said information via a network for use by bill  
19 payers; and

20 an agent interface coupled to said database adapted to allow a plurality of  
21 agents having agency relationships with said plurality of billers to communicate  
22 with said bill payers regarding bills.

1 48. (Currently Amended) A system according to Claim 47, wherein said plurality  
2 of agents interface is further adapted to allow said plurality of agents to

3 communicate with said plurality of billers regarding said bills of said bill payers.

1 49. (Currently Amended) An electronic bill presentment and payment system for  
2 presenting and paying bills via the Internet, said system comprising:

3 parsing functionality which is adapted to parse billing data from a plurality  
4 of billers using rules of conversion according to which the parsing functionality is  
5 programmed, corresponding to a plurality of data types, and to provide relevant  
6 information, said rules of conversion being a rules application process, allowing a  
7 user to generate a translator for parsing the billing data into a common document  
8 tree;

9 a common document model processing functionality adapted to transform  
10 said relevant information into a common document model, said common  
11 document model adapted to accommodate relevant information from said plurality  
12 of billers and according to said plurality of data types, wherein said common  
13 document tree contains data and attributes which are mapped into nodes which fit  
14 said common document model for storage;

15 a database adapted to store said transformed information from said common  
16 document model processing functionality;

17 a presentation functionality adapted to retrieve information from said  
18 database and output at least some of said information via a network for use by bill  
19 payers;

20 bill payer interactivity functionality adapted to detect and respond to

21 communications from said bill payers by at least retrieving from said database  
22 information corresponding to said bill payers and presenting said information to  
23 said bill payers in a form requested by said bill payers; and  
24 biller interactivity functionality adapted to detect and respond to  
25 communications from said plurality of billers by at least retrieving from said  
26 database information corresponding to said plurality of billers and presenting said  
27 information to said plurality of billers in a form requested by said plurality of  
28 billers.

1 50. (Currently Amended) A system according to Claim 49, wherein said biller  
2 interactivity functionality and said bill payer interactivity functionality are further  
3 adapted to present substantially the same information to said plurality of billers  
4 and said bill payers in order to allow said plurality of billers to interact with said  
5 bill payers regarding said same information.

1 51. (Currently Amended) An electronic bill presentment and payment system for  
2 presenting and paying bills via the Internet, said system comprising:

3 a modularized input processing engine, said input processing engine  
4 adapted to preprocess billing data from a plurality of billers corresponding to a  
5 plurality of data types;

6 a parsing engine including parsing functionality which is adapted to parse  
7 said billing data from a plurality of billers using rules of conversion according to  
8 which said parsing functionality is programmed, said billing data corresponding to

9 said plurality of data types, and to provide relevant information for further use by  
10 said system;  
11 a common document model processing functionality adapted to  
12 transform said relevant information into a common document model, said  
13 common document model adapted to accommodate relevant information from  
14 said plurality of billers and according to said plurality of data types;  
15 a database adapted to store said transformed information from  
16 said common document model processing functionality; and  
17 a presentation functionality adapted to retrieve information  
18 from said database and output at least some of said information via a network for  
19 use by bill payers.

1 52. (Currently Amended) The system according to Claim 51, further comprising  
2 an interactivity functionality adapted to detect and respond to communications  
3 from said bill payers by at least (i) retrieving information from said database and  
4 presenting it to said bill payers in a form requested by said bill payers; and (ii)  
5 altering information in said database corresponding to said bill payers according to  
6 said communications.

1 53. (Currently Amended) The system according to Claim 51, further comprising a  
2 financial source interface adapted to send and receive communications to and from  
3 at least one financial entity and to alter information in said database according to  
4 said financial source communications.

1 54. (Currently Amended) The system according to Claim 51, further comprising a  
2 financial source interface adapted to send and receive communications to and from  
3 at least one financial entity based at least in part on communications from said bill  
4 payers and to alter information in said database corresponding to said bills of said  
5 payers, according at least in part to said financial source communications.

1 55. (Currently Amended) The system according to Claim 51, further comprising  
2 an interactivity functionality adapted to detect and respond to communications  
3 from said plurality of billers by at least (i) retrieving information from said  
4 database and presenting it to said plurality of billers in a form requested by said  
5 plurality of billers and (ii) altering information in said database corresponding to  
6 said plurality of billers according to said communications.

1 56. (Cancelled)

1 57. (Currently Amended) The system according to Claim 51, further comprising a  
2 biller interface coupled to said database adapted to allow said plurality of billers  
3 to identify market segments of said bill payers according to market rules and  
4 information retrieved from said database.

1 58. (Currently Amended) The system according to Claim 51, further comprising  
2 an interactivity functionality adapted to detect and respond to communications  
3 from said plurality of billers regarding market segments of said bill payers by  
4 retrieving information from said database and altering appearance and content of

5 bills presented to said bill payers based on said communications.

1 59. (Currently Amended) The system according to Claim 51,, further comprising  
2 an interactivity functionality adapted to detect and respond to communications  
3 from said plurality of billers regarding market segments of said bill payers by  
4 retrieving information from said database and sending marketing messages to said  
5 bill payers based on said communications.

1 60. (Currently Amended) The system according to Claim 51, further comprising  
2 an agent interface coupled to said database adapted to allow a plurality of agents  
3 having agency relationships with said plurality of billers to communicate with said  
4 bill payers regarding bills.

1 61. (Cancelled)

1 62. (Currently Amended) A method of providing electronic bill presentment and  
2 payment services, said method comprising the steps of:

3 modularizing the preprocessing of billing data from a plurality of billers  
4 corresponding to a plurality of data types;

5 extracting relevant information from said billing data, corresponding to said  
6 plurality of data types, from said plurality of billers using rules of conversion;

7 transforming said relevant information into a common document model,  
8 said common document model is adapted to accommodate said relevant  
9 information from said plurality of billers and according to said plurality of data

10 types;  
11 storing said transformed information from said common  
12 document model in a database; and  
13 retrieving said transformed information from said database and  
14 outputting at least some of said information via a network for use by bill payers.

1 63. (Currently Amended) The method of Claim 62, wherein said billing data is  
2 extracted from a print stream of data provided by said plurality of billers.

1 64. (Currently Amended) The method of Claim 62, wherein said billing data is  
2 extracted from a data interchange stream of data provided by said plurality of  
3 billers.

1 65. (Currently Amended) The method of Claim 62, wherein said billing data is  
2 extracted from a financial data stream provided by said plurality of billers.

1 66. (Cancelled)

1 67. (Cancelled)

1 68. (Cancelled)

1 69. (Cancelled)

1 70. (Cancelled)



71. (Currently Amended) An electronic bill presentment and payment system for presenting and paying bills via the Internet, said system comprising:

a modularized input processing engine, wherein said input processing engine is adapted to preprocess billing data from a plurality of billers, said input processing engine including a parsing functionality adapted to parse said billing data from said plurality of billers using rules of conversion according to which the parsing functionality is programmed, corresponding to a plurality of data types, and to provide relevant information, said rules of conversion being a rules application process, allowing a user to generate a translator for parsing the billing data into a common document tree;

a common document model processing functionality adapted to transform said relevant information into a common document model, said common document model adapted to accommodate said relevant information from said plurality of billers and according to said plurality of data types, wherein said common document tree contains data and attributes which are mapped into nodes which fit said common document model for storage;

a database adapted to store said transformed information from said common document model processing functionality;

presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers;

bill payer interactivity functionality adapted to detect and respond to

communications from said bill payers by at least retrieving from said database information corresponding to said bill payers and presenting said information to said bill payers in a form requested by said bill payers; and

billers interactivity functionality adapted to detect and respond to communications from said plurality of billers by at least retrieving from said database information corresponding to said plurality of billers and presenting said information to said plurality of billers in a form requested by said plurality of billers.

72. (Currently Amended) The system according to Claim 71, further comprising an interactivity functionality adapted to detect and respond to communications from said bill payers by at least (i) retrieving information from said database and presenting it to said bill payers in a form requested by said bill payers; and (ii) altering information in said database corresponding to said bill payers according to said communications.

73. (Currently Amended) The system according to Claim 71, further comprising a financial source interface adapted to send and receive communications to and from at least one financial entity and to alter information in said database according to said financial source communications.

74. (Currently Amended) The system according to Claim 71, further comprising a financial source interface adapted to send and receive communications to and from

at least one financial entity based at least in part on communications from said bill payers and to alter information in said database corresponding to said bills of said payers, according at least in part to said financial source communications.

75. (Currently Amended) The system according to Claim 71, further comprising an interactivity functionality adapted to detect and respond to communications from said plurality of billers by at least (i) retrieving information from said database and presenting it to said plurality of billers in a form requested by said plurality of billers and (ii) altering information in said database corresponding to said plurality of billers according to said communications.

76. (Currently Amended) The system according to Claim 71, further comprising an interactivity functionality adapted to send and receive communications to and from at least one financial entity based at least in part on communications from said bill payers and to alter information in said database corresponding to said bills of said bill payers, according at least in part to said communications.

77. (Currently Amended) The system according to Claim 71, further comprising a biller interface coupled to said database adapted to allow said plurality of billers to identify market segments of said bill payers according to market rules and information retrieved from said database.

78. (Currently Amended) The system according to Claim 71, further comprising an interactivity functionality adapted to detect and respond to communications

from said plurality of billers regarding market segments of said bill payers by retrieving information from said database and altering appearance and content of bills presented to said bill payers based on said communications.

79. (Currently Amended) The system according to Claim 71, further comprising an interactivity functionality adapted to detect and respond to communications from said plurality of billers regarding market segments of said bill payers by retrieving information from said database and sending marketing messages to said bill payers based on said communications.

80. (Currently Amended) The system according to Claim 71, further comprising an agent interface coupled to said database adapted to allow a plurality of agents having agency relationships with said plurality of billers to communicate with said bill payers regarding bills.

81. (Currently Amended) The system according to Claim 71, further comprising a control functionality adapted to allow said plurality of billers to control at least one of said parsing functionality, said common document model functionality, said database functionality, and said presentation functionality.